What is Claimed is:

1. A mill blank assembly for a dental prosthesis comprising:

a milling section made of a material suitable for making a dental prosthesis; and

a support section having a shaft for releasably supporting the mill blank assembly in a milling machine, the support section being bonded to the milling section by a chemical bond directly between the material of the support section and the material of the milling section.

2. A mill blank assembly according to claim 1 wherein the milling section is made of a dental restorative material that comprises a polymerizable resin.

3. A mill blank assembly according to claim 2 wherein the restorative material comprises a polymer-ceramic composite material.

4. A mill blank assembly according to claim 2 wherein the polymerizable resin comprises a light-curable resin.

5. A mill blank assembly according to claim 2 wherein the polymerizable resin includes an initiator that is capable of initiating both free radical and cationic polymerization.

6. A mill blank assembly according to claim 1 wherein the support section includes a flange and a shaft integrally connected to the flange.

7. A mill blank assembly according to claim 1 wherein the support section includes a through passageway that receives a quantity of material that is the same composition as the material of the milling section and is integrally connected to the milling section.

8. A mill blank assembly according to claim 7 wherein the through passageway includes at least one undercut area.

9. A mill blank assembly according to claim 1 wherein the milling section comprises a polymer-ceramic composite material and wherein the support section comprises a methacrylate-based polymer.

10. A dental mill blank assembly consisting essentially of a milling section and a support section, wherein the milling section is made of a material having a composition different than the composition of the support section.

11. A dental mill blank assembly according to claim 10 wherein the milling section is made of a dental restorative material that comprises a polymerizable resin.

12. A dental mill blank assembly according to claim 11 wherein the restorative material comprises a polymer-ceramic composite material.

13. A dental mill blank assembly according to claim 11 wherein the polymerizable resin comprises a light-curable resin.

14. A dental mill blank assembly according to claim 10 wherein the support section includes a through passageway that receives a quantity of material that is the same composition as the material of the milling section and is integrally connected to the milling section.

15. A dental mill blank assembly according to claim 14 wherein the through passageway includes at least one undercut area.

16. A dental mill blank assembly according to claim 10 wherein the milling section comprises a polymer-ceramic composite material and wherein the support section comprises a methacrylate-based polymer.

17. A dental mill blank assembly comprising:

a support section having a shaft for releasably supporting the mill blank assembly in a milling machine, the support section including a through passageway; and

a hardened restorative material connected to the support section, wherein a portion of the hardened restorative material is located within the passageway, and wherein another portion of the hardened restorative material is located externally of the passageway, serves as a milling section and is integrally connected to the portion of hardened restorative material located within the passageway.

18. A mill blank assembly according to claim 17 wherein the support section includes a flange and a shaft integrally connected to the flange.

19. A mill blank assembly according to claim 17 wherein the through passageway includes at least one undercut area.

20. A mill blank assembly according to claim 17 wherein the restorative material comprises a polymer-ceramic composite material and wherein the support section comprises a methacrylate-based polymer.

21. A mill blank assembly according to claim 17 wherein the restorative material is a light-curable restorative material.

22. A method of making a dental mill blank assembly comprising the acts of:

providing a mold assembly that includes a first mold component, a second mold component and a mold cavity defined at least in part by the first mold component and the second mold component;

directing a quantity of restorative material into the mold cavity;

reacting the restorative material with the second mold component in order to establish a chemical bond between the restorative material and the second mold component; and

hardening the restorative material located in the mold cavity.

23. A method of making a dental mill blank assembly according to claim 22 wherein the first mold component is hollow, and wherein the second mold component is received in the first mold component.

24. A method of making a dental mill blank assembly according to claim 23 wherein the second mold component is movably received in the first mold component.

25. A method of making a dental mill blank assembly according to claim 22 wherein the act of directing a quantity of restorative material into the mold cavity includes the act of moving at least a portion of the restorative material through a passageway in the second mold component.

26. A method of making a dental mill blank assembly according to claim 25 wherein the act of providing a mold assembly includes the act of providing a third mold component that is received in the first mold component.

27. A method of making a dental mill blank assembly according to claim 26 wherein the act of directing a quantity of restorative material into the mold cavity includes the act of moving the third mold component relative to the second mold component.

28. A method of making a dental mill blank assembly according to claim 27 wherein the second mold component and the first mold component do not move relative to each other as the third mold component moves relative to the second mold component.

29. A method of making a dental mill blank assembly according to claim 22 wherein the act of providing a mold assembly includes the act of providing a passageway into the mold cavity through at least one of the first mold component and the second mold component.

30. A method of making a dental mill blank assembly according to claim 22 wherein the act of reacting the restorative material with the second mold component is carried out at least in part during the act of hardening the restorative material.

31. A method of making a dental prosthesis comprising the acts of:

providing a mold assembly that includes a first mold component, a second mold component and a mold cavity defined at least in part by the first mold component and the second mold component;

directing a quantity of restorative material into the mold cavity;

establishing a bond between the restorative material and the second mold component;

hardening the restorative material located in the mold cavity;

separating the first mold component from the restorative material;

mounting the second mold component in a milling machine; and

milling the hardened restorative material at least partially into a dental prosthesis.

32. A method of making a dental prosthesis according to claim 31 wherein the act of directing a quantity of restorative material into the mold cavity includes the act of directing a portion of the restorative material into a location in contact with the second mold component.

33. A method of making a dental prosthesis according to claim 31 wherein the first mold component is hollow and wherein the second mold component is received at least partially in the first mold component.

34. A method of making a dental prosthesis according to claim 33 wherein the first mold component includes an inner side, wherein the second mold component includes a front face in contact with the restorative material, and wherein the act of directing a quantity of restorative material into the mold cavity includes the act of introducing the restorative material into the mold cavity under pressure such that the restorative material bears against the front face of the second mold component and the inner side of the first mold component and relatively moves the front face and the inner side away from each other.

35. A method of making a dental prosthesis according to claim 33 wherein the act of hardening the restorative material includes the act of directing a source of light toward the mold cavity.

36. A method of making a dental prosthesis according to claim 35 wherein the first mold component is made of a material that transmits actinic radiation, and wherein the act of directing a source of light toward the mold cavity includes the act of directing a source of light through a wall of the first mold component.

37. A method of making a dental prosthesis according to claim 31 wherein the act of directing a quantity of restorative material into the mold cavity includes the act of moving at least a portion of the restorative material through a passageway in the second mold component.

38. A method of making a dental prosthesis according to claim 31 and including the act of applying pressure to at least one of the components during at least a portion of the time that restorative material is directed into the mold cavity in order to resist free relative movement of the mold components in directions away from each other.

39. A method of making a dental prosthesis according to claim 38 wherein the act of directing a quantity of restorative material into the mold cavity includes the act of sliding the first mold component and the second mold component relative to each other.

40. A method of making a dental prosthesis according to claim 31 wherein the act of directing a quantity of restorative material into the mold cavity includes the act of moving the first mold component and the second mold component relative to each other.

41. A method of making a dental prosthesis according to claim 40 wherein the act of moving the first mold component and the second mold component relative to each other includes the act of relatively moving the first mold component and the second mold component in sliding, telescoping relationship.

42. A method of making a dental prosthesis according to claim 41 wherein the act of moving the first mold component and the second mold component relative to each other includes the act of holding the first mold component in a stationary position while the second mold component moves.

43. A method of making a dental prosthesis according to claim 31 wherein the act of establishing a bond between the restorative material and the second mold component includes the act of establishing a chemical bond.

44. A method of making a dental prosthesis according to claim 43 wherein the act of establishing a chemical bond includes the act of reacting the restorative material with the second mold component.

45. A method of making a dental prosthesis according to claim 43 wherein the act of establishing a chemical bond is carried out at least in part during the act of hardening the restorative material.

46. A method of making a dental prosthesis according to claim 31 wherein the act of establishing a bond between the restorative material and the second mold component includes the act of establishing a mechanical bond.

47. A method of making a dental prosthesis according to claim 46 wherein the mechanical bond is established in at least one undercut area of the second mold component.

48. A method of making a dental mill blank assembly comprising the acts of:

directing a quantity of restorative material through a passageway of a support section; and

hardening restorative material located within the passageway as well as restorative material located externally of the passageway, such that the hardened restorative material located externally of the passageway serves as a milling section and the hardened restorative material located within the passageway resists detachment of the milling section from the support section.

49. A method of making a dental mill blank assembly according to claim 48 wherein the support section serves as a second mold component, and wherein the method also includes the act of providing a first mold component that is hollow to receive the support section.

50. A method of making a dental mill blank assembly according to claim 49 wherein the support section is movably received in the first mold component.

51. A method of making a dental mill blank assembly according to claim 50 and including the act of providing a third mold component that is received in the first mold component.

52. A method of making a dental mill blank assembly according to claim 51 wherein the act of directing a quantity of restorative material through a passageway of the support section includes the act of directing a quantity of restorative material into a mold cavity and the act of moving the third mold component relative to the second mold component.

53. A method of making a dental mill blank according to claim 49 wherein the act of hardening restorative material includes the act of directing a source of light through the first mold component.

54. A method of making a dental mill blank according to claim 48 and including the act of reacting the restorative material with the support section in order to establish a chemical bond.

55. A method of making a dental mill blank assembly according to claim 48 wherein the act of directing a quantity of restorative material through a passageway of the support

section includes the act of moving a portion of the restorative material into an undercut area located in the passageway.

56. A method of making a dental mill blank assembly according to claim 48 wherein the act of hardening the restorative material includes the act of directing a source of light toward the passageway.